

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-4. (Canceled)

5. (Previously Presented) A method of manufacturing a semiconductor device, said method comprising the steps of:

forming a first amorphous semiconductor film comprising silicon and germanium on an insulating surface wherein a concentration of the germanium is within a range of 0.1 atom% to 10 atom%;

forming a second amorphous semiconductor film on and in contact with the first amorphous semiconductor film; and

crystallizing each of first and second amorphous semiconductor films by irradiating with an excimer laser light.

6. (Previously Presented) A method of manufacturing a semiconductor device, said method comprising the steps of:

forming at least an electrode on an insulating surface;

forming an insulating film covering the electrode;

forming a first amorphous semiconductor film comprising silicon and germanium on the insulating film wherein a concentration of the germanium is within a range of 0.1 atom% to 10 atom%;

forming a second amorphous semiconductor film on and in contact with the first amorphous semiconductor film; and

crystallizing the each of the first and second amorphous semiconductor films by irradiating with an excimer laser light.

7. (Original) A method according to claim 5, wherein the second amorphous semiconductor film includes silicon.

8-14. (Canceled)

15. (Currently Amended) A method of manufacturing a semiconductor device, said method comprising the steps of:

forming a first amorphous semiconductor film including silicon and germanium on an insulating surface wherein a concentration of the germanium is within a range of 0.1 atom% to 10 atom%;

forming a second amorphous semiconductor film including silicon on the first amorphous semiconductor film;

introducing an element capable of promoting crystallization of silicon into the first amorphous semiconductor film or the second amorphous semiconductor film after forming the second amorphous semiconductor film;

crystallizing each of the first and second amorphous semiconductor films by heating to form a first crystalline semiconductor film and a second crystalline semiconductor film, respectively.

16. (Currently Amended) A method of manufacturing a semiconductor device, said method comprising the steps of:

forming a first amorphous semiconductor film including silicon and an element having a larger atomic radius than silicon on an insulating surface wherein a concentration of said element is within a range of 0.1 atom% to 10 atom%;

forming a second amorphous semiconductor film including silicon on the first amorphous semiconductor film;

introducing an element capable of promoting crystallization of silicon into the first amorphous semiconductor film or the second amorphous semiconductor film after forming the second amorphous semiconductor film;

crystallizing each of the first and second amorphous semiconductor films by heating to form a first crystalline semiconductor film and a second crystalline semiconductor film, respectively.

17. (Previously Presented) A method according to claim 15, further comprising the step of:

irradiating with a laser light to obtain a higher crystallinity of each of the first and second crystalline semiconductor films after the crystallizing step.

18. (Previously Presented) A method according to claim 15, further comprising the step of:

irradiating with a light from one selected from the group consisting of a halogen lamp, a xenon lamp, a mercury lamp, a metal halide lamp as a light source to obtain a higher crystallinity of each of the first and second crystalline semiconductor films after the crystallizing step.

19. (Original) A method according to claim 15,  
wherein each of the first and second semiconductor films is formed by a plasma CVD apparatus,

wherein a turbo molecular pump is used in an exhaust means connected to a reaction chamber of the plasma CVD apparatus.

20-22. (Canceled)

23. (Original) A method according to claim 6, wherein the second amorphous semiconductor film includes silicon.

24-28. (Canceled)

29. (Previously Presented) A method according to claim 16, further comprising the step of:

irradiating with a laser light to obtain a higher crystallinity of each of the first and second crystalline semiconductor films after the crystallizing step.

30. (Previously Presented) A method according to claim 16, further comprising the step of:

irradiating with a light from one selected from the group consisting of a halogen lamp, a xenon lamp, a mercury lamp, a metal halide lamp as a light source to obtain a higher crystallinity of each of the first and second crystalline semiconductor films after the crystallizing step.

31. (Original) A method according to claim 16,  
wherein each of the first and second semiconductor films is formed by a plasma CVD apparatus,

wherein a turbo molecular pump is used in an exhaust means connected to a reaction chamber of the plasma CVD apparatus.

32-34. (Canceled)

35. (Previously Presented) A method of manufacturing a semiconductor device, said method comprising the steps of:

forming a first amorphous semiconductor film comprising silicon and germanium on an insulating surface wherein a concentration of the germanium is within a range of 0.1 atom% to 10 atom%;

forming a second amorphous semiconductor film on and in contact with the first amorphous semiconductor film;

introducing an element capable of promoting crystallization of silicon into the first amorphous semiconductor film or the second amorphous semiconductor film; and

crystallizing each of first and second amorphous semiconductor films by irradiating with a laser light.

36. (Previously Presented) A method of manufacturing a semiconductor device, said method comprising the steps of:

forming at least an electrode on an insulating surface;

forming an insulating film covering the electrode;

forming a first amorphous semiconductor film comprising silicon and germanium on the insulating film wherein a concentration of the germanium is within a range of 0.1 atom% to 10 atom%;

forming a second amorphous semiconductor film on and in contact with the first amorphous semiconductor film;

introducing an element capable of promoting crystallization of silicon into the first amorphous semiconductor film or the second amorphous semiconductor film; and

crystallizing the each of the first and second amorphous semiconductor films by irradiating with a laser light.

37. (Previously Presented) A method according to claim 35, wherein the second amorphous semiconductor film includes silicon.

38. (Previously Presented) A method according to claim 36, wherein the second amorphous semiconductor film includes silicon.

39. (Previously Presented) A method of manufacturing a semiconductor device, said method comprising the steps of:

forming a first amorphous semiconductor film comprising silicon and germanium on an insulating surface wherein a concentration of the germanium is within a range of 0.1 atom% to 10 atom%;

forming a second amorphous semiconductor film on and in contact with the first amorphous semiconductor film;

introducing an element capable of promoting crystallization of silicon into the first amorphous semiconductor film or the second amorphous semiconductor film; and

crystallizing each of first and second amorphous semiconductor films by irradiating with an excimer laser light.

40. (Previously Presented) A method of manufacturing a semiconductor device, said method comprising the steps of:

forming at least an electrode on an insulating surface;

forming an insulating film covering the electrode;

forming a first amorphous semiconductor film comprising silicon and germanium on the insulating film wherein a concentration of the germanium is within a range of 0.1 atom% to 10 atom%;

forming a second amorphous semiconductor film on and in contact with the first amorphous semiconductor film;

introducing an element capable of promoting crystallization of silicon into the first amorphous semiconductor film or the second amorphous semiconductor film; and

crystallizing the each of the first and second amorphous semiconductor films by irradiating with a laser light.

41. (Previously Presented) A method according to claim 39, further comprising the step of:

irradiating with a laser light to obtain a higher crystallinity of each of the first and second crystalline semiconductor films after the crystallizing step.

42. (Previously Presented) A method according to claim 39, further comprising the step of:

irradiating with a light from one selected from the group consisting of a halogen lamp, a xenon lamp, a mercury lamp, a metal halide lamp as a light source to obtain a higher crystallinity of each of the first and second crystalline semiconductor films after the crystallizing step.

43. (Previously Presented) A method according to claim 39,  
wherein each of the first and second semiconductor films is formed by a plasma CVD apparatus, and

wherein a turbo molecular pump is used in an exhaust means connected to a reaction chamber of the plasma CVD apparatus.

44. (Previously Presented) A method according to claim 40, further comprising the step of:

irradiating with a laser light to obtain a higher crystallinity each of the first and second crystalline semiconductor films after the crystallizing step.

45. (Previously Presented) A method according to claim 40, further comprising the step of:

irradiating with a light from one selected from the group consisting of a halogen lamp, a xenon lamp, a mercury lamp, a metal halide lamp as a light source to obtain a higher crystallinity of each of the first and second crystalline semiconductor films after the crystallizing step.

46. (Previously Presented) A method according to claim 40,

wherein each of the first and second semiconductor films is formed by a plasma CVD apparatus, and

wherein a turbo molecular pump is used in an exhaust means connected to a reaction chamber of the plasma CVD apparatus.